

Chapter 7

WILDLIFE

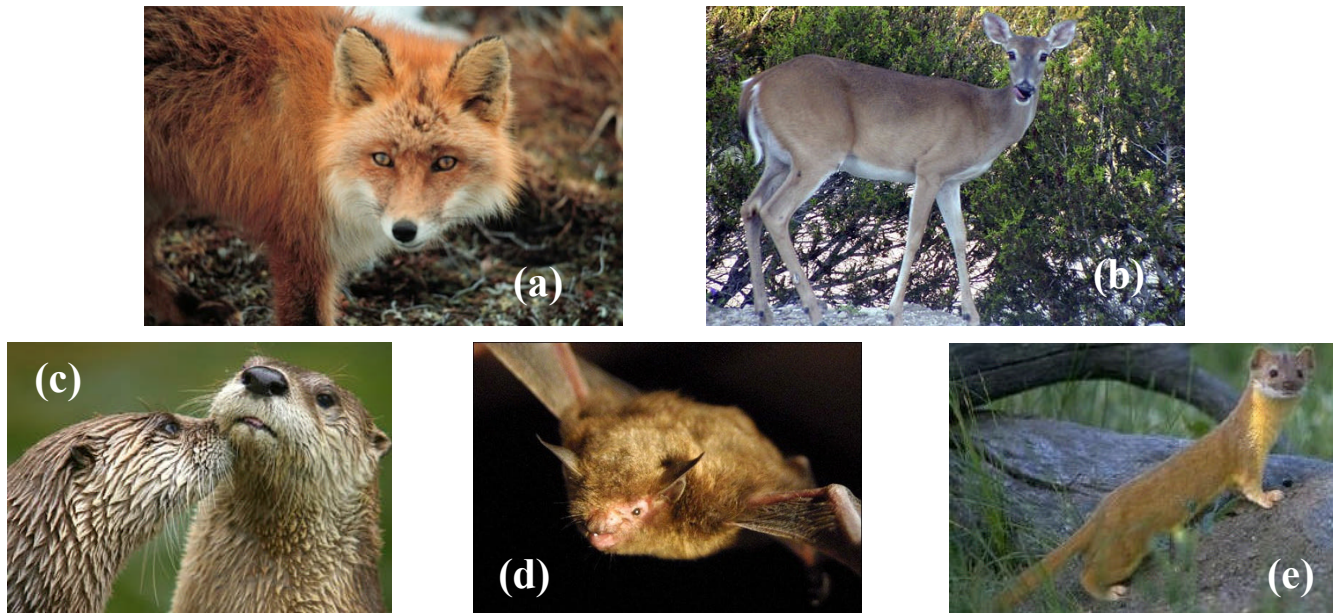


Figure 1: Mammals in Chatham township. (a) The red fox is the largest of the true foxes. It is present in large numbers in our township and the adjoining great swamp. Recently, there have been several sightings of the red fox in our residential neighborhood, which suggest its threatening habitat. (b) The white-tailed deer, also known as the Virginia deer or simply as the whitetail, is a medium-sized deer native to the United States, Canada, Mexico, Central America, and South America as far south as Peru. The white-tailed deer species has tremendous genetic variation and is adaptable to several environments. They are present in large numbers in our town. (c) The river otter was extirpated from the great swamp and surrounding areas until they started reappearing in the 1970's. Now they are present in moderate numbers and are reproducing. (d) The Indiana bat is a medium-sized *Myotis* (species of the bat family) closely resembling the little brown bat but differing in coloration. This federally endangered tree roosting species is found in good numbers across our area. (e) The long-tailed weasel has a small head with long whiskers, a long body and neck and short legs. Its tail has a black tip. It has brown fur on the upper part of its body and white to yellow fur on its undersides. In the northern parts of its habitat range, it turns white in the winter. The weasel is a common animal, but rarely seen.

Chatham Township is a delight for bird and nature lovers. Almost 26% of Chatham township is part of the Great Swamp Wildlife Refuge (GSWR) [6, 4] land. The Great Swamp National Wildlife Refuge contains over 7,735 acres of hardwood swamp, upland timber, marsh and open water, brush and grassland. This diverse habitat attracts a wide variety of birds. In 1968 the eastern half of the refuge was designated as a wilderness area to be left forever wild.

Wild animals in Chatham township are limited to those native species which have been able to adapt to a people-oriented environment. They tend to be furtive creatures, many of them nocturnal in habit. They tend to keep a safe distance between themselves, and man and his domesticated pets. The best chances of observing Chatham's wildlife is to frequent the great swamp refuge where they may be spotted by a visitor with a keen eye or ear and a good dose of luck.

Although established primarily to preserve habitat for migratory birds [5], there is an abundance of other wild life, including mammals. Toward evening, visitors are likely to see white tailed deer feeding in the fields. Raccoons are common but rarely seen during daylight hours. Muskrats may be seen in wet areas at dawn and dusk especially in the spring. The river otter was extirpated in the Great Swamp until it reappeared in the 1970s. Now it is present in moderate numbers and is reproducing. Opossum is commonly seen along streams and marshes near

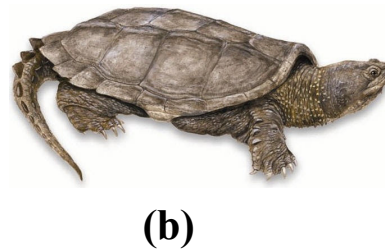
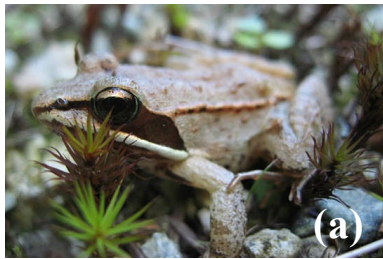


Figure 2: Amphibians and reptiles seen in Chatham township. (a) The wood frog is a common frog found in leaf litter of wet woodlands, often a considerable distance from water. It grows to about three inches long. The wood frog is most easily recognized by its "robber mask." This black band stretches past both eyes to the eardrums. They prefer wooded areas with small temporary pools for breeding during early spring. It is commonly found in the great swamp. (b) The common snapping turtle can be found in habitats such as ponds, lakes, streams, rivers, swamps and freshwater marshes. Adults can weigh up to 45 pounds. Snapping turtles are mostly nocturnal. They will feed underwater during the day, ambushing prey. These turtles are very shy in the water, but on land they are very aggressive and will give a painful bite. (c) Eastern painted turtles are water turtles. They can grow up to nine inches long. They are black with smooth, flattened shells. They are very common in our area, and can be seen basking on logs and rocks in both permanent and temporary bodies of water. (d) The blue-spotted salamander is a slender salamander three to five inches in length, with a long tail. It is gray to blue-black with blue spots on its sides, tail and legs. They are fairly common, but are secretive. Adults are nocturnal. They spend the day underground and emerge at night to feed. Breeds in temporary forest pools during early spring. (e) The Eastern Ribbon Snake is typically found in the Northeastern United States and Southeastern Canada. You can usually find them in wetlands and near the edges of ponds and streams. It gets its name from its very thin body. It is a semi-aquatic species that inhabits streams, marshes, bogs, swamps and ponds. It swims at the surface often skirting the shoreline and likes to bask in bushes near the waters edge. When startled it takes to water. (f) The northern brown snake is a small snake that grows to about 1 ft. in length. This snake lives in moist to wet areas in woodland, prairies, marshes, and in the margins of swamps, bogs and ponds. In areas of human habitation it sometimes occurs in vacant lots and gardens. They are very secretive, and rarely found in the open. They like to hide under surface objects such as boards, logs and rocks. They are normally active during the day, but become nocturnal in warm weather.

wooded areas. Red fox is commonly seen throughout the swamp, and there have been quite a few sightings in the residential neighborhoods after dusk. Bats are summer residents of the refuge, migrating from caves and abandoned mines where they hibernate in winter. Coyotes are rarely observed, but sometimes in the evening a series of yelps may be heard in the swamp. Black bear is rarely observed on the refuge. Around 10 years back a resident recorded a sighting of a black bear up a tree in his yard. There have been no known or recorded sightings since. Red squirrels, gray squirrels and eastern chipmunks are around everywhere we look.

The sightings of birds and mammals start early in the swamp and continue year round. Canada Geese, Wood Duck, American Black Duck, Mallard, Green Winged Teal are common. The Hooded Merganser is uncommon, but are known to nest in and around the refuge. The common loon is quite uncommon. Great Blue Heron, Turkey Vultures, Black Vultures, Northern Harriers, Red-Tailed Hawks, Killdeer, Eastern Screech Owl, Great Horned Owl are common. Closer to home in the backyard the Downy Woodpecker, Northern Flicker, Tree Swallows, Black Capped Chickadees, Red-eyed Vireos, American Crows, Robins, Bluejays and Cardinals

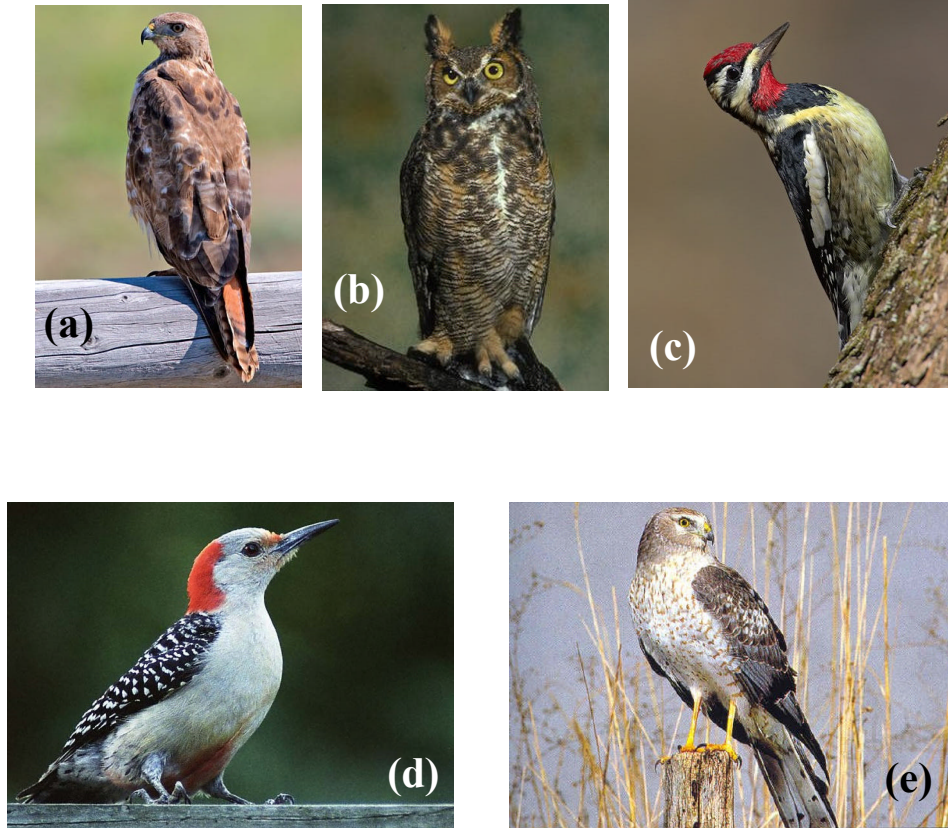


Figure 3: Birds of Chatham township. (a) The red-tailed hawk is a bird of prey, one of three species colloquially known in the United States as the "chickenhawk". This raptor grows up to 25 inches long and can weigh up to four pounds. Its wingspan can reach four feet. They are fairly common in our area, except during summers. (b) The great horned owl, also known as the Tiger owl, is a large owl native to the Americas. It is an adaptable bird with a vast range and is the most widely distributed true owl in the Americas. It is commonly sighted in Chatham throughout the year. (c) The yellow-bellied sapsucker is a mid-sized woodpecker, measuring 18–22 cm in length, 34–40 cm in wingspan and weighing from 40–63 gms (1.4–2.2 oz). Adults are black on the back and wings with white bars; they have a black head with white lines down the side and a red forehead and crown, a yellow breast and upper belly, a white lower belly and rump and a black tail with a white central bar. Adult males have a red throat; females have a white throat. This bird is not very common in our area, but the best time to see them is during spring and fall. (d) The red-bellied woodpecker is also a medium-sized woodpecker. Adults are mainly light gray on the face and underparts; they have black and white barred patterns on their back, wings and tail. Adult males have a red headside going from the bill to the nape; females have a red patch on the nape and another above the bill. They are 9 to 10.5 inches long, and have a wingspan of 15 to 18 inches. This bird is seen in abundance in the great swamp and our town. (e) The northern harrier is a bird of prey. It is 45–55 cm long with a 97–118 cm wingspan. It resembles other harriers in having distinct male and female plumages. The sexes also differ in weight, with males weighing an average of 350 gms and females an average of 530 gms. It is fairly common in our area.

loudly proclaim their territories to anyone who will listen. The state endangered Black-crowned Night Heron, the Yellow-crowned Night Heron, Pied Bill Grebe, Red-shouldered Hawk, Bobolink, Savannah Sparrow are rare but occasionally seen by the lucky bird watcher.

Chatham attracts bird watchers from near and far. Visitors to the great swamp diligently record their sightings in the refuge log book. The sightings for the last 2 weeks of April 2011 paint a portrait of a swamp coming alive with spring. One entry talks about the ground being covered with trout lilies and violets. Spring Azure butterflies flutter near a flowering spice bush. A great blue heron wades in the pond while a belted kingfisher flies overhead. Bullfrogs and gray tree frogs croak from wherever they are hiding. A red bat roosts while a red-tailed hawk circles overhead - eyes keen to any movement on the trout lily covered floor. The May log book talks of Box Turtles, Snapping Turtles, Painted Turtles, Eastern Garter Snakes, Flycatchers, Yellow Warblers, Northern Orioles, and a weasel carrying a dead chipmunk. Year round the sightings continue, attesting to the abundance of

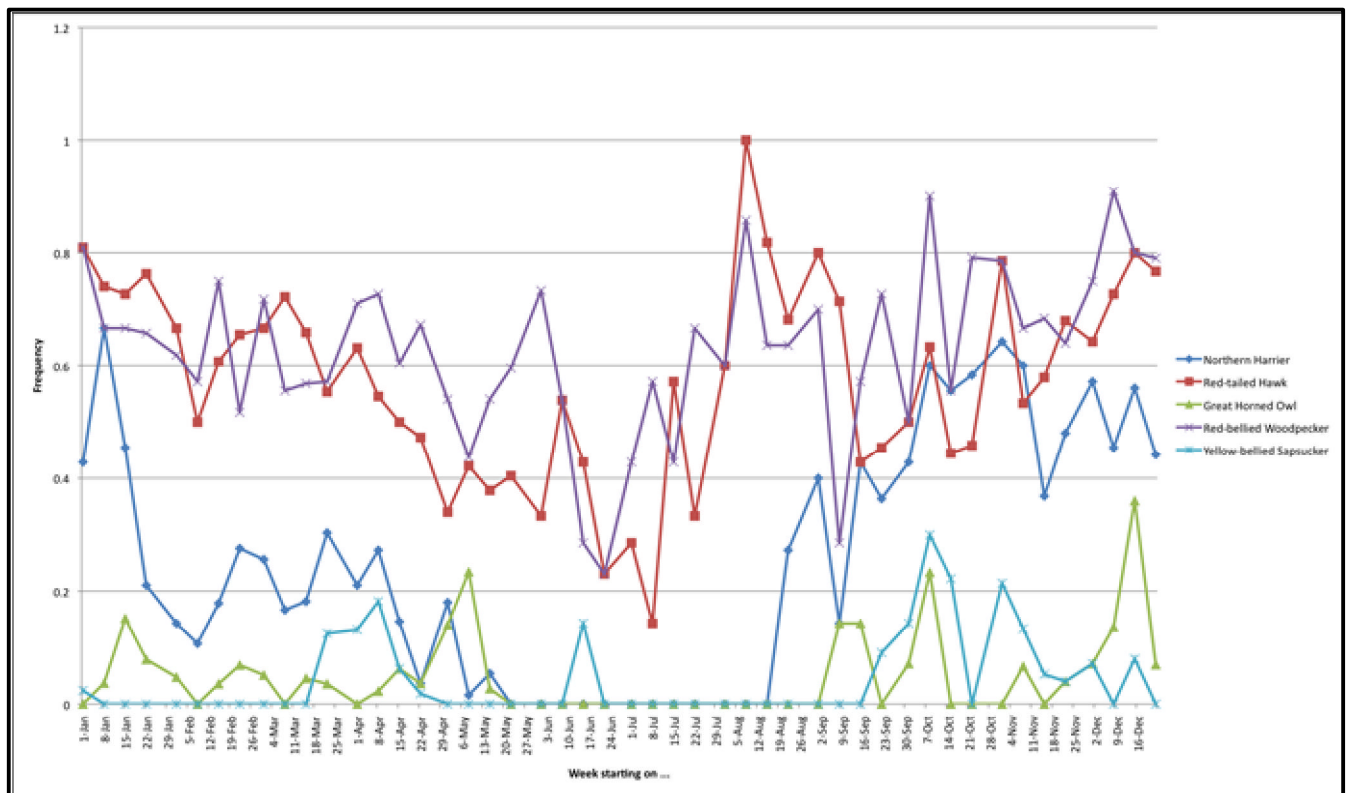


Figure 4: This plot was generated using data from the eBird (<http://www.ebird.org>) website. The plot above shows the frequency of observation throughout the year in Chatham township of the 5 birds shown in Figure 3. According to the eBird website, "frequency" is the percentage of checklists reporting the species within a specified date range and region. This is the most conservative way of displaying the eBird data. For example, when looking at data on Chatham township we learn that the Northern Harrier is reported on roughly 40% of checklists during the week starting Sept 1. In contrast, the Great Horned Owl is not reported on any of the checklists from the same region and date range.

plant, bird and animal life in the protected habitat of the Great Swamp. Elsewhere in the township though, micro-habitats are lost to development with ever increasing stresses and loss of native flora and fauna.

Further loss of bio-diversity in the township and adjoining Refuge due to development and other man-made causes will be a great shame to our residents. Long-term planning for development of the township must take these considerations into account.

THREATENED AND ENDANGERED SPECIES

Threatened and endangered species in Chatham Township include

- Hawk, red-shouldered (*Buteo lineatus*) State endangered
- Owl, barred (*Strix varia*) State threatened
- Turtle, bog (*Glyptemys muhlenbergii*) State and Federal endangered
- Turtle, wood (*Glyptemys insculpta*) State threatened
- Salamander, blue-spotted (*Ambystoma laterale*) State endangered
- Bat, Indiana (*Myotis sodalis*) State and Federal endangered
- Sharp-shinned Hawk (*Accipiter striatus*) NJ Special Concern
- Eastern Box Turtle (*Terrapene carolina carolina*) NJ Special concern

Good habitat for these species occurs in many areas because of the abundant wetlands and extensive preserved open space both in the Great Swamp National Wildlife Refuge and in township land outside of the refuge. Hawks can readily forage for rodents in the open linear power line rights-of-way and are also frequently found at suburban bird feeders. Barred owls have been reported in wetlands near Loantaka Lane South. Bog turtles are known to occur in wetlands near the power lines. Wood and box turtles are found in most of the wetlands in the township. Blue-spotted salamanders have been found in backyard swimming pools! And in many of the numerous vernal ponds in the township. Indiana bats have been spotted in woods near the Hickory Tree shopping area.

The presence of these species in the township is sufficiently well documented that development and building applications routinely include a check for their presence. In several cases building plans were altered to accommodate the creatures. In another case careless supervision of workers resulted in the deaths of several of the known 12 bog turtles in the area. Important tools for the encouragement of these and all species are the increased documenting of vernal pools by the New Jersey Department of Environmental Protection and the environmental regulation of more uplands.

References

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- [2] List of Observed Reptiles, Amphibians and Fish: Great Swamp National Wildlife Refuge. <http://www.fws.gov/northeast/greatswamp/PDF/greatswampamphib2008.pdf>, 2008.
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- [4] Great Swamp Outdoor Education Center. <http://www.morrisparks.net/aspparks/gswampmain.asp>, Dec 2011.
- [5] eBird: Global tools for Birders. <http://www.ebird.org>, March 2012.
- [6] US Fish & Wildlife Service: Great Swamp National Wildlife Refuge. <http://www.fws.gov/northeast/greatswamp>, January 2012.